AECS, MYSORE

Class 7 Science Worksheet

Chapter: Acids, Bases, and Salts

Section A: Multiple Choice Questions (MCQs)

- 1. Which of the following is an acid?
 - a) Vinegar b) Soap c) Baking soda d) Lime water
- 2. Which of these is a natural indicator?

a) Sugar b) Litmus c) Vinegar d) Water

- 3. A base tastes:
 - a) Sweet b) Bitter c) Salty d) Sour
- 4. Which of the following turns red litmus blue?

a) Lemon juice b) Vinegar c) Soap solution d) Orange juice

5. What is formed when an acid reacts with a base?

a) Only salt b) Only water c) Salt and water d) Gas and water

6. Which of these is used to treat an ant bite?

a) Hydrochloric acid b) Vinegar c) Baking soda d) Common salt

- 7. Phenolphthalein turns _____ in a basic solution.
 - a) Colorless b) Red c) Pink d) Yellow
- 8. Turmeric is:

a) An acid b) A base c) An indicator d) A neutral substance

- 9. Which of these is a mineral acid?
 - a) Citric acid b) Acetic acid c) Sulphuric acid d) Lactic acid
- 10. Neutral substances have a pH value of:

a) 7 b) 5 c) 3 d) 9

Section B: Assertion and Reason Question

(Choose: a) Both A and R are true and R is the correct explanation of A;

- b) Both A and R are true but R is not the correct explanation of A;
- c) A is true but R is false;
- d) A is false but R is true)

- Assertion (A): Bases are used in making soaps.
 Reason (R): Bases have a slippery feel.
- 12. Assertion (A): Lemon juice turns blue litmus red.Reason (R): Lemon juice is a base.
- 13. Assertion (A): Baking soda is used to neutralize acid in the stomach.Reason (R): It is basic in nature.
- 14. Assertion (A): Red litmus paper turns blue in acidic solution.Reason (R): Acids turn blue litmus red.
- 15. Assertion (A): Turmeric paste turns red with a base. Reason (R): Turmeric is a natural indicator.

Section C: Short Answer Questions

- 16. What are indicators? Give examples of two natural indicators.
- 17. What is acid rain?
- 18. Write the differences between acids and bases (any three points).
- 19. What is a neutralization reaction? Write a word equation with an example.
- 20. How can you test whether a given substance is an acid or a base using turmeric?

Section D: Long Answer Questions – [5 marks each]

- 21. Describe the neutralization reaction with the help of an example.
- 22. Explain the role of acids and bases in everyday life with any four examples.
- 23. How do antacids work? What are their chemical properties?
- 24. List five common acids and five common bases along with their uses.
- 25. What happens during an acid-base reaction? Explain with an experiment you can do at home to observe this.